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an
Inaugural Dissertation
on
acute Peritonitis

Respectfully submitted
To the

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of

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By

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On Peritonitis

When we contemplate at what length the diseases of the bowels have been treated by most physicians of every age & country, we cannot but be surprised that Peritonitis a disease which in many respects is so closely allied to many of those affections, particularly Cholic & Enteritis, should have attracted so little attention & is comparatively so little understood. It being however, a disease, insidious in its nature & replete with danger, & having been marked by some peculiarity of treatment, different from the two already mentioned, I have thought proper to bestow on it a more particular consideration, though not so much with a view of saying any thing new on the subject, as with a hope of exciting the attention of those to it, who are better able to give to it a more just & satisfactory investigation.

The symptoms which characterize Acute Peritonitis, are rigors & shivering with pain in the abdomen, varying very much in its seat, its degree of violence & general character. Sometimes the

pain is confined to a particular part, but most commonly, it is diffused over the abdomen. It is very much increased by pressure, & in some cases, it is very little complained of, except, when pressure is made, having the feel rather of tenderness than acute pain. Quickly succeeding to these symptoms are more or less of fever. The pulse, is remarkably small, quick & corded, & unless strictly, attended to may deceive the practitioner as to the nature of the complaint. The patient now complains of thirst heat & dryness of the tongue & fauces, though dryness of these parts do not uniformly take place for frequently they are perfectly moist. Then there are the more ordinary symptoms which usher in an attack of Peritonitis, but most commonly in 12 or 24 hours & frequently in a much shorter period, the pain & tenderness of the abdomen become so much increased, that the weight of the bed clothes are rendered

almost insupportable. Examined at this time, we should find the patient on his back, writhing under most excruciating pain, with his knees drawn up, the tention & swelling of his abdomen considerably augmented, his pulse small & contracted to the fuel, & his Tongue covered with a tough cream coloured mucus. The drawing up of the knees, is a very prominent symptom in this disease, for scarcely is there a case, where the patient does not recur to this posture, to relieve himself of pain. This it does by relaxing the abdominal muscles, & throwing the weight of the intestins on the back. The state of the bowels varies greatly in Peritonitis, sometimes they are loose, but most commonly in a natural condition being very readily moved by very mild medicines. Evacuations from the bowels produce however little relief, but seem rather to aggravate his sufferings during the time of operation & after it is over.

As however the disease advances, all the symptoms increase, particularly the pain + tumefaction of the abdomen. It now frequently hapens at this conjuncture, that the pain which before was excruciating + excessive, suddenly to cease as if relieved by some one of our remedies. We should however not construe this into an auspicious omen as it is most commonly considered by those who have had much experience in the disease, to be the precursor of death. With this sudden subsidence of pain, there likewise takes place a corrisponding subsidence in the force of the pulse, which is greatly increased in rapidity as much so indeed, that it can scarcely be counted, dark matter is now vomited or expelled from the Stomach with hyppuitus or a paroxodic effort. Cold Clammy sweats now break out, the extremities become cold + clammy, the countenance collapsed + haggard + finally difficult + laborious respiration closes the tragic scene. Inflammation of

The Peritoneum may occur in a more limited form than the one I have mentioned, & according to the seat of, of various neighboring organs are affected, which gives rise to a great diversity of symptoms. When it is in the lower part of the abdomen, it is generally accompanied by frequent painful desire to pass urine, & an acute pain extending along the urethra, leading to the suppression or retention of urine the catheter, being employed in such cases the bladder is found empty. When the inflammation is seated in that part of the Peritoneum contiguous to the Stomach & upper part of the alimentary canal, there is great nausea & vomiting, & sometimes a peculiar disagreeable eructation or belching up wind. Hiccup & quick short breathing attend which is probably connected with an affection of the diaphragm. Such are the general characters of Peritonitis, it differs however from Phrenitis & Enteritis in this, that the bowels are natural or loose, the pulse small & corded & above 100 in a minute, by

the pain, in Peritonitis being more permanent, by its being increased by pressure even before tension has taken place, in the abdomen, by its producing no inclination to go to stool, & by its not being diminished if this evacuation be produced spontaneously or by design. What however is most remarkable in Peritoneal inflammation is, that portion of it which lines the parieties of the abdomen never extends its inflammation to the muscles anteriorly. The fact is exactly the reverse as it regards the viscera contained in the abdominal cavity. Peritoneal inflammation may extend to the mucous tunic of the intestines & terminate in confirmed Enteritis. It is yet a question among practitioners, whether inflammation may be confined to the investing of the Peritoneum lining the parieties of the abdomen, without affecting the intestinal canal? As it regards the prognosis of Peritonitis we should be encouraged only by a change when it is attended with a

gradual diminution of all the symptoms, but more particularly that of the patients extending his lower extremities, & his own accord, this is always favourable unless mortification has taken place. On a post mortem examination the Peritoneum will be found minutely injected with red blood, & exhibiting all the marks of the highest grade of inflammation with effusion of Coagulable lymph & in some cases extensive ulceration & mortification" to be found.

It would appear from the history of Peritonitis which I have given, that there would be little doubt as to the correct mode of treatment to be pursued, this I find however not to be the case. In no disease perhaps has there been more disputation or difference of opinion concerning the proper mode of treatment to be pursued than the one now under consideration. Whilst some allow that the liberal

use of Opium is the proper mode to be pursued, there are others that utterly deny its utility, & urge the disusing measures to the fullest extent. Nor is this difference of opinion confined to the more illiterate of our profession. Many of the most enlightened practitioners of Europe, particularly Sir George Fordice & his disciples maintain that Opium is the proper remedy & the only worthy to be relied on. Although the Pathology of Peritonitis seems not to be well understood yet there can be certainly very little doubt as to the correct mode of treatment to be pursued. When called to a case of Peritonitis we should consider that we have under our care, a species of inflammation very rapid in its course & is not timely arrested immediately proves fatal. Since then to subdue inflammation seems to be our first object, we must combat it in the most active manner, by the most appropriate remedies for this purpose. There are three of the most important

of which is bloodletting, pushed as far as possible consistent with the strength of the patient & the urgency of the symptoms, regard being chiefly had to the pulse. The pulse in this disease, is never active or strong but feeble corded & depressed in proportion to the violence of the attack, so that it rises as we eliminate extract blood. In no case of inflammation, is blood letting of more avail, unless it be used at an early period of the disease & pushed to such an extent, as to produce a decided impression on the system which is indicated by weakness of pulse, paleness & some degree of faintness. The pain however should be the chief criterion, by which the practitioner should be regulated in bleeding, never to stop the flow of blood until the pain, is removed or very much diminished. Simple detraction by the lancet will not always succeed in relieving the pain or in eradicating or curing the disease though it keeps it under, & mitigates greatly its violence.

finding that the lancet cannot eradicate the disease,
we should as an auxiliary have recourse to
topical depletion, by cups or leaches taking away as
much blood by these means as possible. As it
respects the after topical applications, such as
fluxes &c. we seem not to be less deputation on
account of a certain diversity with regard to binding.
Determining from a knowledge of the experience of Dr Chapman
which has not been limited in this disease, & to
which I always advise with the greatest deference,
I am lead to believe with him, that they are
among the most important of the topical applications
& should by no means be omitted. They should
& unobtrusively be employed, by warm fomentations
to the abdomen, & by liberal direct stimulus. The
evil made by which fomentations can be effected,
is by bread & milk poultices laid on over the
whole abdomen, or by musk placed in a bag
moderately full so that it may adapt itself more
accurately to the contour of the belly. The next step

to be removed, is to excite cutaneous perspiration, this
can be the happiest effect in Peritoneal inflammation
Sea bathing seems to excite these beneficial
influences by drawing off the blood from the
capillaries of the Peritoneum and determining it
to the surface of the body by giving to it a
centrifugal direction. To induce perspiration
we should employ mostly in external means,
& above all in the Vapour bath. The operation
of the bath should be aided by the use of
diaphoretics internally in to which opium enters
largely, the best of which seems to be the
Dovers Powders. To show the great utility of the
bath a case is related by Dr Chapman in his
Lectures, in which two of the most eminent practitioners
in Phila were engaged, they had taken from
140 to 150 ℥ of blood in a short period, without
apparently having derived any or much benefit. It was
now proposed by some one of them, to excite
perspiration, & the vapour bath was employed.

Scarcely had the remedy began to act, when the pulse became soft & all the symptoms very much mitigated, from the termination of this case the Dr. has been led to the diaphoretic plan early in the disease, but never until V Section has been copiously used. It has ever been remarked as a distinguishing symptom in this disease, that however great the pain may be, there is no desire to go to stool & that evacuations from the bowels produce no relief to the patient. Unavailing however as cathartics may be in this disease yet they should not be entirely overlooked. Why evacuations from the bowels by purgatives, are considered less serviceable in Peritoneal inflammation than in any of the Phlegmasiæ I cannot pretend to say. That they are among the most important remedies in Puerperal Fever, no one I presume will pretend to deny & that this is a disease dependent in a great measure on Peritoneal inflamation there can be at present scarcely a little doubt. The bowels however in Peritonitis should

always be kept in a soluble condition, either either by mild laxatives, or by enemita which perhapse is preferable. In making use of the enemita they should be composed of the mildest ingredients & exhibited in the largest quantities so as to act as emolients to the intestines.

Peritoneal inflammation I must again repeat, is replete with danger & beset with difficulties from the commencement. In most cases it is well marked from the commencement, though sometimes irregularities occur which is well calculated to mislead the practitioner, & divert his attention from those remedies by which it should be always encountered. Frequently in the commencement of a violent attack there is great prostration of strength, & the pulse is so low & feeble as to induce a belief that the patient is too much debilitated to admit of direct elevation. A case of this kind is always one of depression or as it were backed up in the system.

If blood be now detracted, it is probable that the patient will sink, & the system not having the power by depression to react the terminals go fatally. In case of this kind we should attempt to rouse the energies of the system & for this purpose the patient should be placed in a warm bath, diaphoretics should be given, at the same time; when the disease begins to develope itself we should make use of small repeated bleedings in order to hasten it, & when fully developed, make use with respect safety & advantage a more liberal use of the lancet.

There are also cases of an opposite character, which are not less dangerous from the false security which it creates. It commences with a slight tenderness of the abdomen, little or no fever, pulse nearly natural being rather quick & a little corded. The practitioner is totally unconscious of the danger which attends

her patient, when suddenly by some unknown cause the system becomes depressed, the pulse sinks the surface covered with a cold clammy sweat, & a discharge of black matter now takes place from the Stomach. This is the most insidious & alarming forme of the disease, & I attribute it to inflammation attacking that part of the Peritoneum contiguous to the Stomach or to the upper part of the alimentary canal.

After having unavailingly tried all the other remedies in this case we should as a dernier resort, recur to the use of the Spirits of Turpentine. Some practitioners recur to it early in the disease, but it is now pretty well agreed that it only should be used when the inflammation is about to terminate in a gangrene, which is manifested by the symptoms I have already mentioned. Turpentine is most commonly recommended in very small doses, from an idea that it is too heating & stimulating to the Stomach, this says Dr Thompson is

is altogether a mistake & when we do recur to it, it is apparently under the most desperate form of the disease. The plan which is to be pursued by him is to administer a tea spoon full of the oil every two or three hours, & increasing it if necessary until its beneficial effects are produced.

Thus Gentlemen I have to the best of my abilities fulfilled the requisitions of your institution. I should be wanting in gratitude, were I not however to express to you, individually, my most sincere thanks, for the many numerous & extensive sources of information which I have received at your hands.

October the 28.th 1822.

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